

# THE BULLETIN



NOVEMBER

1938

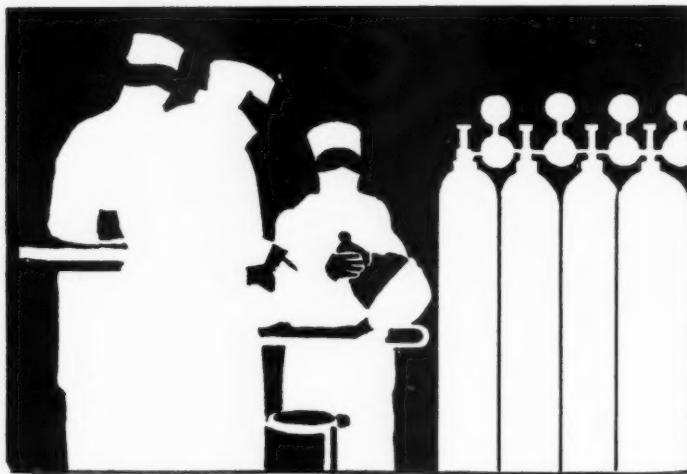
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VOLUME 6

—

NUMBER 4

THE NATIONAL ASSOCIATION  
OF



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**THE ANESTHETIST—**

**THE HOSPITAL MANAGEMENT—**

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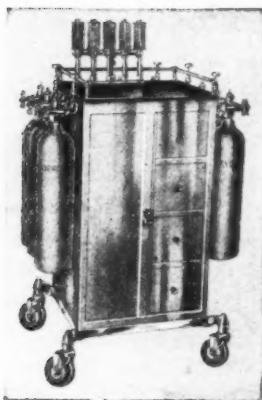
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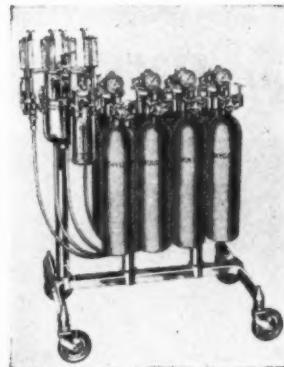
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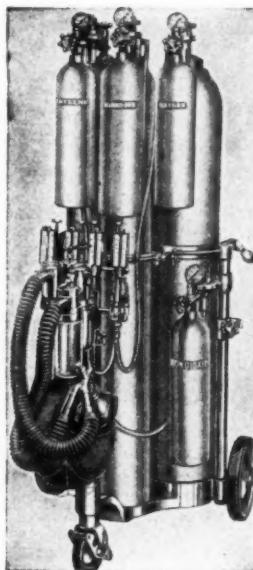


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<sup>1</sup> Pulmonary Complications Following 1,333 Administrations of Cyclopropane. J.A.M.A., April 2, 1938.

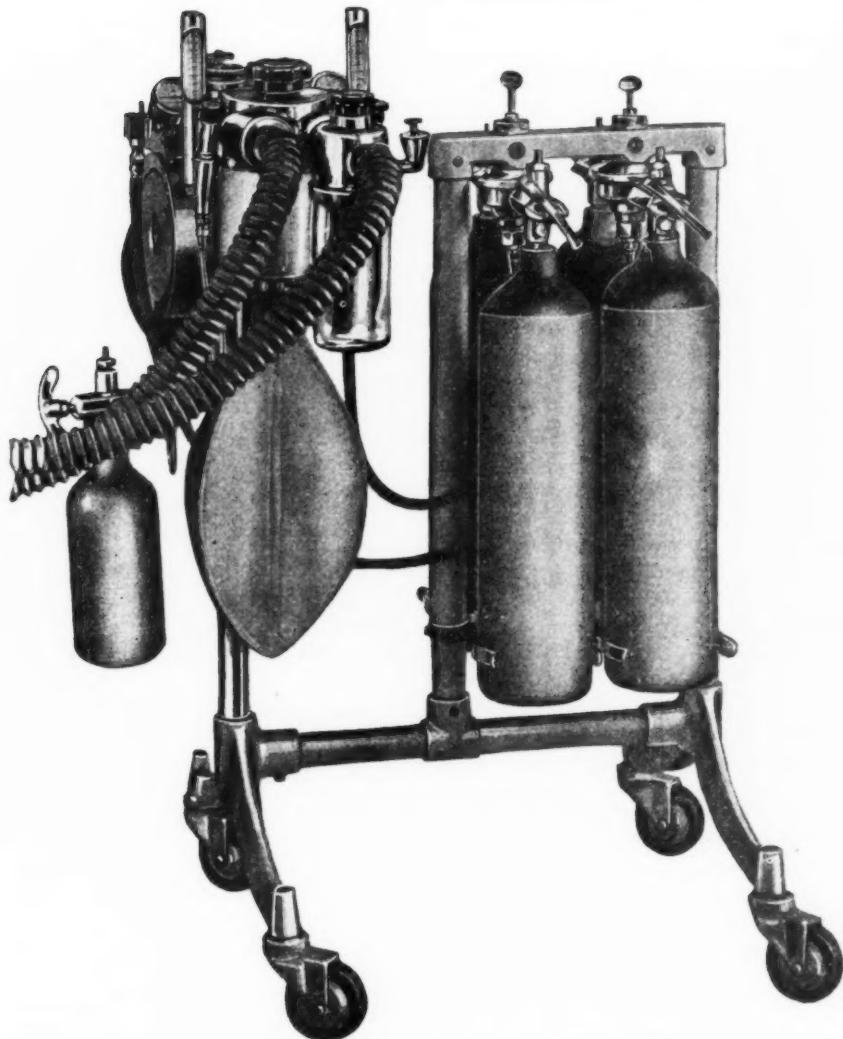
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# The Bulletin of the National Association of Nurse Anesthetists

VOLUME 6, NO. 4

NOVEMBER, 1938

## THE CONTENTS

	PAGE
Report of the sixth annual convention	
Report of President.....	194
Report of Executive Secretary.....	196
Report of Treasurer.....	198
Report of Membership Committee.....	199
Report of Educational Committee.....	199
Report of Public Relations Committee.....	200
Report of Publishing Committee.....	201
Report of Trust Fund Committee.....	203
Report of Placement Bureau Committee.....	204
Measures Adopted to Increase Revenue.....	205
Officers Elected .....	205
State Activities Reported at the Annual Meeting.....	206
Coming Meetings .....	210
Report of Alumnae Meeting.....	210
"A Double Monaural Stethoscope for Anesthetists"	
Frederick W. Niehaus, M.D., and Agnes Hain	212
Panel Discussion	
"Relation of the Anesthetist to the Hospital and the Surgeon"	
Bryce L. Twitty	213
Chas. W. Flynn, M.D.	215
"Sodium Pentothal in Major Surgery".....	Anne Beddow 219
"Training of the Nurse Anesthetist".....	Hattie Vickers 224
Discussion .....	Frances Hess 226
Advertisements:	
Puritan Compressed Gas Corporation.....	Inside front cover
The Heidbrink Company.....	189
Mallinckrodt Chemical Works.....	190
McKesson Appliance Company.....	191
E. R. Squibb & Sons.....	228
The Cheney Chemical Company.....	Inside back cover
The Ohio Chemical & Mfg. Company.....	Outside back cover

The Bulletin of the National Association of Nurse Anesthetists is published quarterly by the National Association of Nurse Anesthetists; Executive, Editorial and Business Offices 2065 Adelbert Road, Cleveland, Ohio.

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The National Association of Nurse Anesthetists does not hold itself responsible for any statements or opinions expressed by any contributor in any article published in its columns.

Entered as second class matter February 6th, 1937, at the Postoffice at Cleveland, Ohio, under the Act of March 3rd, 1879.



MIRIAM G. SHUPP  
President

## REPORT OF THE SIXTH ANNUAL CONVENTION

(Condensed)

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### REPORT OF PRESIDENT

MIRIAM G. SHUPP

*Strong Memorial Hospital, Rochester, N. Y.*

It is most encouraging to see this representative group from our profession here at this annual meeting. Some of you are interested primarily in personal improvement and wish to learn newer methods, discuss mutual professional problems and take advantage of postgraduate instruction. A convention of this nature affords ample opportunities for such benefits. Others are interested not only in these cultural improvements but also desire to take part in the functional activities of this organized group. Both motives are commendable, and with regard to those whose interests have been more or less personal ones, we hope that through these conventions, affording stimulating contacts with those who are giving their time to both state and national organization work as officers or committee members, and through reports and publications, an ever-increasing number will gradually become interested in the group activities.

It is an old saying that we do the things we like to do, but it was true before our organization was formed that many anesthetists had slight opportunity to discover or use their inherent abilities along the line organization provides. With the founding of the Association by a far-seeing pioneer nurse anesthetist, we have been given the opportunity to use these latent powers and to make ourselves a cohesive and articulate group. These opportunities are not the privilege of the

few only, but the privilege and responsibility of all.

Before reviewing the work of the year, the report of which I shall make as brief as possible, may I express my personal thanks to each and every member of the Program and Local Arrangements Committee who has been working diligently since the first of the year, to make this convention a memorable one in the history of the National Association.

Since the Executive Secretary, the Treasurer and the chairmen of the various committees will give you detailed outlines of the activities of the organization during the past year in their respective departments, I shall confine my remarks to reviewing briefly some of our accomplishments and objectives for the future.

You will recall that at the Atlantic City meeting, it was decided to move headquarters from Cleveland to Chicago, which is the center of medical and allied activities and serves as a pivotal point around which the National and State organizations may function with increasing effectiveness. This task was accomplished in the late fall and Miss Anna Willenborg assumed the responsibilities of the position of Executive Secretary in the new location, continuing her duties as head of the School of Anesthesia at St. Joseph's Hospital. Despite the fact that at this time a full-time office secretary was employed, it became increasingly ap-

parent to your Executive Secretary, the Officers and Board of Trustees that the organization had arrived at a point in its development where it must decide whether it should continue with the Executive Secretary on a part-time basis only. With the moving of headquarters to Chicago, increased demands were made on her time because of the growth of the national organization and the increasing number of state organization problems, together with the establishment of the Placement Bureau at headquarters, and she felt (and justly so) that she could no longer continue in both positions and devote to each as much time and energy as were demanded. After a comprehensive study of the situation, the Board of Trustees finally came to the conclusion that the time had come when, for the best interests of the organization, it was advisable to employ a full-time Executive Secretary. Miss Willenborg, who has taken an active part in nursing organization activities and especially in the organization of the National Association of Nurse Anesthetists, was offered and accepted the post, assuming her duties on July first. We are particularly fortunate in having secured the services of Miss Willenborg for this important position—a key post in any organization. Not only does she have as a background a thorough knowledge of the organization, but as Director of a School of Anesthesia for many years she has been an active participant in the education of nurse anesthetists.

Although we have a substantial reserve in the bank at present, we must give consideration during this convention as to how we can best meet the increasing expenditures which are inevitable with any growing concern, and still maintain a substantial reserve in the National treasury.

Regarding legislation, I am happy to

report that nothing which would be detrimental to nurse anesthetists has been proposed during the year. We urge, however, that a close surveillance be maintained in each state on such matters and a prompt report be sent to headquarters regarding any proposed adverse legislation.

During the year Michigan and Colorado have organized and become affiliated with the National Association, and Georgia and the State of Washington are at present in the process of organization. There have been 372 new members admitted to the organization (369 active and 2 associate) and Michigan, which organized during the year, leads in the number of new members, having admitted 53 during the year. It is our earnest hope that with the full-time Executive Secretary at headquarters to assist not only states already organized, but those that have not yet organized, that during the coming year members in the unorganized states with a substantial membership total will proceed with organization plans.

The Placement Bureau was established during this year and I shall leave the details of the activities of the Bureau to be reported by the Placement Bureau Committee.

The activities of the Educational Committee have been concerned with the perfecting of plans rather than the execution of them. The detailed report will be presented by the Committee.

Tangible evidence of the work of the Publishing Committee has come to you four times during the year. Probably none of us who are not familiar with this type of work can appreciate fully the amount of work which each issue of the Bulletin represents, but I hope that as we read them thought will be given to the great amount of time and energy which has been expended by

this Committee in publishing this quarterly.

After having held the position of President for a year, with its many attendant duties and responsibilities, I am persuaded that I might have served you better had I spent a preparatory year as President-Elect. Believing that my successors would also benefit by such an arrangement, I therefore make the following recommendation:

1. That the By-laws be changed to provide for a President-Elect, who will automatically succeed to the presidency the following year for a one-year term, the President-Elect to be a member of the Board during that year in order that she may become familiar with all details of the activities of the office. That this change be effected during the next several years at a time best suited to the organization interests.

Your President also recommends:—

1. That the Educational Program be given paramount consideration in the plans for the coming year.

2. That the dues of this Association be increased to meet the present financial needs, effective immediately.

It has been a privilege and a pleasure to have served the Association during 1937-1938. The year has ended all too soon to accomplish many things which we had hoped to do. With the establishment of the National headquarters in Chicago and the appointment of an Executive Secretary devoting her entire time to the interests of our National and State organizations, I am confident that what has been accomplished this year will serve as the foundation upon which can be built an association of which we shall all be truly proud to say, "I am a member of the National Association of Nurse Anesthetists."

### REPORT OF EXECUTIVE SECRETARY

At the annual meeting of the National Association held in Atlantic City in September, 1937, your Executive Secretary was appointed, with the understanding that she devote as much time as possible to the work of the organization, still continuing in her position as Chief Anesthetist at St. Joseph's Hospital, Chicago.

On October 13, 1937, the files were closed in Cleveland (where National headquarters had been maintained since the Association was organized), and transferred to the new headquarters at 18 East Division Street, Chicago, Illinois, where the files and furniture arrived on October 16th. A full-time office secretary was also employed.

With the increasing activities at headquarters, it was later deemed necessary to employ a full-time Executive Secretary and upon recommendation

and approval by the Board, I was appointed and assumed this office July 1, 1938.

In attempting to keep the machinery of the Association in motion I have been in a position for the past year to appreciate, as I did not quite fully appreciate while a member of the ranks, the vast amount of time and effort devoted to the Association by the past Executive Secretary and Treasurer, who have made an inestimable contribution to the Association.

The work of the organization has increased and developed, I believe beyond our expectations and already the office at headquarters sometimes seems inadequate for its needs. The daily background of work is the routine of correspondence with the State Secretaries, individual members, committees and various persons asking for advice

or information. It includes answering many requests in regard to schools of anesthesia, applications for membership, legislation regarding nurse anesthetists, requests for positions and anesthetists, et cetera. During the past year the correspondence has covered 2,542 incoming and 3,268 outgoing letters on all these subjects and many others too numerous to mention. This does not include applications, statements for dues, et cetera. There have been interviews, conferences, visits at headquarters, and committee meetings taking anywhere from one-half to two hours. It has been interesting and I would like to encourage visits to headquarters so that we may learn your needs and desires and how we can be of assistance to you. I realize that there are many problems which are pressing us at headquarters which must be solved if we are to serve the membership efficiently.

The National Association of Nurse Anesthetists is truly alive and its aim is to function as a useful organization. I believe one of the major tasks is to evaluate the now existing schools of anesthesia. There is no reason why we should not push forward with confidence in an effort to raise the standards of the schools of anesthesia and advance the work which was so well begun by the leaders of this organization. I wish you could all realize the responsibility in helping to carry this program forward.

I should like to take this opportunity to express my sincere thanks to all of you for the trust and confidence that has been placed in me. My work has been interesting, and it has been inspiring and gratifying to have had such hearty cooperation from your secretaries and the members at large, in helping to make this a successful conven-

tion. I also wish to thank the Association officers, particularly the Secretaries, and all members, for their cooperation and patient indulgence in our attempt to serve the Association this past year.

There is much to be done. May I quote from a noted philosopher:

"A task without a vision is drudgery;  
A vision without a task is a dream;  
But a task with a vision  
Is the hope of the world."

As members of the National Association of Nurse Anesthetists you look to us as leaders—may we look to you for support.

The following is a brief summary of the activities at headquarters:

Total paid-up membership Sept. 1, '38.

Active .....	1560
Associate .....	72
<hr/>	
Total .....	1632

Delinquent members Sept. 1, 1938:

Active .....	107
Associate .....	5
<hr/>	
Total .....	112

New members accepted..... 372

Members resigned during current year .....

..... 4

Deceased .....

..... 2

Requests from hospitals for anesthetists .....

..... 57

Anesthetists requesting positions..

..... 25

Changes of address .....

..... 356

Transfers of membership made from one state to another...

..... 208

Requests for lists of schools..... 81

Pieces of mail sent out from Oct. 15, 1937 to Sept. 1, 1938..... 6012

Respectfully submitted,

ANNA WILLENBORG,

Executive Secretary

## REPORT OF TREASURER

Cash in Bank August 31, 1937 ..... \$ 7,826.68

*Receipts: September 1, 1937, to August 31, 1938:*

Initiation Fees .....	\$ 371.00
Dues—National Association .....	3,231.60
—State Associations .....	1,590.00
National Pins .....	101.25
Trust Fund .....	222.40
Publishing Fund .....	879.95
Income Sales Advertising .....	1,174.00
Bank Interest .....	94.40
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	7,664.60
	<hr style="width: 100px; margin-left: 0; border: 0; border-top: 1px solid black; margin-bottom: 5px;"/>
	\$15,491.28

*Disbursements: September 1, 1937, to August 31, 1938:*

Transfers to States .....	\$ 312.50
Refund initiation fees .....	2.00
Refund dues .....	2.50
Stenographic Service .....	1,297.76
Salary Executive Secretary .....	225.00
Accounting Service .....	50.00
Legal Services .....	200.00
Contribution to American Hospital Association (in con- sideration for use of office space in American Hospital Ass'n Building) .....	720.00
Rent (previous to moving headquarters to Chicago) ..	14.61
Postage .....	315.05
Telephone and Telegraph .....	90.17
Office Supplies and Printing .....	268.13
Traveling Expense .....	159.47
Publishing Bulletin .....	2,002.98
Periodicals and Books .....	8.00
Convention Expense .....	947.79
Office Equipment .....	117.19
National Pins .....	53.25
Petty Cash — headquarters .....	20.00
Petty Cash — reduction, Treasurer's office .....	10.00
Miscellaneous .....	96.89
	<hr style="width: 100px; margin-left: 0; border: 0; border-top: 1px solid black; margin-bottom: 5px;"/>
	6,893.29
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Cash in Bank August 31, 1938 ..... \$ 8,597.99

Consisting of the following:

Savings Acct. No. 38726, Cleveland Trust Co. ....	\$3,254.34
Savings Acct. No. 102794, Nat'l City Bank of Cleveland. ....	4,520.43
Commercial Acct., Cleveland Trust Co. ....	823.22
	\$8,597.99

The foregoing figures have been verified by the auditor and his report is on file.

Respectfully submitted,

September 12, 1938

GERTRUDE L. FIFE, Treasurer

## REPORT OF MEMBERSHIP COMMITTEE

Beginning November 1, 1937, there have been 372 applications received. One application only was not acceptable. Two applicants qualified for associate membership and three associate members qualified for active membership.

It is very interesting to note the activities in the different states in regard to membership.

Michigan leads with 53 new members, Illinois 45 " " (Illinois not organized)

Pennsylvania 35 " " New York 21 " "

The following is the complete list of new members:

Alabama	5	North Dakota	1
Arkansas	2	South Dakota	2
Connecticut	9	Florida	10
North Carolina	4	Georgia	8
California	9	Iowa	6

Illinois	45	Ohio	11
Idaho	3	Oklahoma	4
Indiana	3	Oregon	14
Kentucky	1	Pennsylvania	35
Kansas	2	Rhode Island	2
Mississippi	8	Tennessee	15
Michigan	53	Texas	18
Minnesota	7	Virginia	13
Missouri	3	West Virginia	2
Maine	2	Vermont	1
Massachusetts	4	Wisconsin	13
Maryland	4	Washington	12
Montana	3	West Indies	1
New York	21	Quebec	1
New Jersey	11	Paris, France	1
Nebraska	2		
Dis. of Columbia	1		372

Respectfully submitted,

TERESA A. McTURK,  
Chairman

MARIAN L. ROBINSON  
FAYE L. FULTON

## REPORT OF EDUCATIONAL COMMITTEE

The Educational Committee is at present working on a listing (and possible grading) of schools of anesthesia which offer training in this subject to graduate nurses. With the groundwork now laid, the listing (and possible appraisal) of such schools will be completed during the coming year.

The Committee's most important activity centers around the movement now under way to enlist the endorsement of the American Hospital Association to our own Association's plans for the inspection of schools of anesthesia for nurse anesthetists; and upon the basis of such inspection to eventually approve those schools whose curriculum proves to be the equivalent of the standard already adopted by our Association.

The matter has been presented to the Chairman of the Council on Professional Practice of the American Hospital Association, at whose recommendation it is to be submitted to that Committee as a whole at the present Convention. Our spokesman is a member of the American Hospital Association who is keenly interested in, and is in strong sympathy with, our movement.

The Educational Committee is convinced of the great desirability of this inspection and eventual certification or approval of schools of anesthesia, looking to the broad protection of the future of the field. At the same time your Committee feels strongly that the endorsement by, and cooperation of, the

American Hospital Association or some other suitable National body, will be of great value in reaching the desired objective.

The next steps to be taken in connection with the plan will be determined by the outcome of the action of the Council of Professional Practice of

the American Hospital Association at the present Convention.

Respectfully submitted,  
HELEN LAMB, Chairman  
FRANCES HESS  
ROSALIE C. McDONALD  
SISTER BORROMEAN SUPPLICKA  
MARY H. MULLER

### REPORT OF PUBLIC RELATIONS COMMITTEE

In presenting the activities of this committee during the past year we are gratified to report that there has been no occasion for legislative proceedings in any state. The status of the nurse anesthetist is recognized by hospitals more to-day than ever before. In this connection we wish to call to your attention the following principles approved by the Board of Trustees of the American Hospital Association:

1. The anesthesia service of the hospital shall be maintained primarily for the benefit of the sick.
2. The anesthesia service of the hospital should be organized as a department, under the direction of a qualified person who should be responsible for all the anesthesia of the hospital.
3. If because of size or isolation or for any other reason a qualified medical specialist in anesthesia be not available, some other member of the general medical staff paying particular attention to anesthesia should be in charge. If nurse anesthetist is used, the physician staff member in charge should be responsible.
4. A qualified medical specialist in anesthesia is entitled to recognition as a professional member of the medical staff and as head of a hospital department.
5. Central administrative supervision of the department of anesthesia can be maintained without infringement on professional rights or professional dignity.
6. The basis of remuneration should be such as would best meet the local situation. This basis may be such as will meet most effectively the needs of the local public, of the individual hospital and of the physicians administering anesthesia.
7. Nurse anesthetists should be on salary and should be responsible to the hospital administration and, for professional direction, to the director of the department.
8. Hospitals and anesthetists should recognize that their primary obligation is efficient service to the patient, with the maximum economy to the patient that is consistent with the quality of service. Neither the hospital nor the anesthetist should exploit the patient or each other.

The above principles clearly indicate the unbiased opinion and cooperation of the American Hospital Association.

Considering the inability of many members of the Association to attend both the State and National conventions, the enthusiasm for arranging State programs is diminishing. It has been suggested that the grouping of States into divisions will make it possible to combine State programs and alternate meetings, and will also estab-

lish a systematic method of accomplishing the major functions of a National organization (recommended in 1935). Four divisions could be divided as follows:

Section 1—To include the New England States, New York, New Jersey, Pennsylvania, Delaware, Maryland and the District of Columbia (approximately 618 members).

Section 2—To include Michigan, Illinois, Indiana, Ohio, Kentucky, Virginia, West Virginia, Minnesota, and Wisconsin (approximately 673 members).

Section 3—To include Tennessee, Arkansas, Louisiana, Mississippi, Alabama, Florida, Georgia, South Carolina,

North Carolina, Iowa, Nebraska, Missouri, Kansas, Texas, and Oklahoma (approximately 384 members).

Section 4—To include North Dakota, South Dakota, Montana, Idaho, Wyoming, Washington, Oregon, California, Arizona, New Mexico, Colorado, Utah and Nevada (approximately 298 members).

If we are to meet the problems of the future effectively, we recommend the above suggestions for further study.

Respectfully submitted,  
HILDA R. SALOMON, Chairman  
CORA MCKAY  
JEAN O'BRIEN  
SISTER MARY BERNADETTE  
MYRA B. QUARLES

## REPORT OF PUBLISHING COMMITTEE

### FINANCIAL STATEMENT

Surplus in Publishing Fund August 31, 1937.....	\$ 546.12
Publishing Fund accumulated September 1, 1937 to August 31, 1938 (subscription price of Bulletin— 50c, deducted from dues of each individual mem- ber) .....	879.95
Total .....	\$1,426.07
Income from Sale of Advertising, September 1, 1937, to August 31, 1938.....	1,305.00 \$2,731.07
Total Cost of Publishing Bulletin, including postage, for year ending August 31, 1938.....	1,992.98
<b>SURPLUS August 31, 1938 .....</b>	<b>\$ 738.09</b>

The following is a brief report of the activities of this committee covering a period of six years:

**Comparative Statistical Report for Years 1933-1938 inclusive:**

Year	No. of pages exclusive of Advertising	No. copies Distributed	Total cost of publishing Bulletin, including postage	Advertising Pages	Advertising Income
1933 (1 issue)	43	1,500	\$ 331.22	5	\$ 150.00
1934 (1 issue)	44	1,500	241.17	6	310.00
1935 (3 issues)	149	3,671	762.92	16	820.00
1936 (3 issues)	185	4,600	1,056.24	19 $\frac{3}{4}$	911.00
1937 (4 issues)	206	6,400	1,422.73	28	1,270.00
1938 (4 issues)	232	7,075	1,992.98	29	1,305.00

**History of the Bulletin**

The work of the Publishing Committee began with the publication of the report of the first annual meeting of the National Association of Nurse Anesthetists, held in Milwaukee in September, 1933, in conjunction with the American Hospital Association. This report included a summary of the business meeting, the papers read, and photographs of the officers. This issue is now exhausted.

The second annual meeting, held in Philadelphia in September, 1934, was also covered by a published report, including the reports of officers and committees and several papers by physicians and surgeons.

The year 1935 was marked by the publication of three issues of the Bulletin, the first of which, in February, included the balance of the papers read at the second annual meeting for which space was not available in the 1934 report. With this issue began also the addition of the Department of State Association Activities—a section which stimulates interest in organization work throughout the country.

Three issues of the Bulletin were published in 1936 and the practice of printing programs and reports of the various state meetings begun in 1935 was continued, together with the publication of photographs of the state presidents elected, as far as it was possible to obtain them.

Beginning with the report of the fifth annual meeting published in the November, 1936, issue, the Bulletin became a regular quarterly magazine. On February 6, 1937, the Bulletin was entered as second class matter at the Cleveland postoffice, effecting a great saving in the cost of mailing.

To date a total of 24,746 copies of all issues have been printed (16 issues), covering 859 pages of reading matter exclusive of advertising, and including fifty-nine scientific papers by nurse anesthetists and fifty-one by doctors.

The above brief outline of six years' work of the Publishing Committee represents careful and constant follow-up work for weeks preceding the publication of each issue in order to obtain copies of papers; many long hours of close application in order to put in suitable form for publication the material available;

and another period of work under pressure to get proofs into the mail and secure final o.k.'s before the deadline press date.

As a committee we wish to express our appreciation for the help that has been extended to us by the nurse anesthetists and others who have contributed papers, and the secretaries of the state organizations who have sent in programs and reports of state meetings.

Your present Chairman, who has served in this capacity continuously beginning with the first issue of the Bulletin in 1933, wishes to express her thanks to those who have served on the committee during these past six years, and to the many members who have given encouragement and inspiration. The work of publishing has been interesting, educational and stimulating, which has helped to compensate for the efforts that we have had to put forth during this period.

In order that the Bulletin may develop into a still more useful and educational magazine, the committee bespeaks the continued interest and cooperation of National and State officers, as well as the membership at large.

Respectfully submitted,

GERTRUDE L. FIFE, Chairman

LOUISE SCHWARTING

JEWELLE C. FINK

MARY VINE ALLISON

September 21, 1938

## REPORT OF TRUST FUND COMMITTEE

The Committee wishes to make a correction in the Trust Fund resolution published in the November, 1937, Bulletin, as follows:

Page 422, first column, 11th line from bottom, which reads:

"The amount of fifty per cent (50%) of"

should read:

"the amount of one hundred per cent (100%) of."

The Committee wishes to acknowledge with grateful appreciation the contribution of \$50.00 from the Alumnae Association of the University Hospitals (Lakeside) School of Anesthesia, which donation was its first gift.

The Treasurer, a member of the committee, has furnished the following financial statement:

Amount accumulated in the Trust Fund:

Sept. 1, 1936, to Aug. 31, 1937..	\$134.60
Sept. 1, 1937, to Aug. 31, 1938..	172.40
Contribution received from the	
Alumnae Association of the	
University Hospitals School of	
Anesthesia .....	50.00

Total .....

\$357.00

The Committee makes the following recommendations:

1. That a copy of the form for bequests or contributions to the Trust Fund be published in each issue of the Bulletin.
2. That the Treasurer, before withdrawing any moneys from the Trust Fund account, must first have in her possession in writing a statement signed by all members of the Board of Trustees authorizing such withdrawal. This statement of authority must contain a full account

of reasons for withdrawal and to whom this money was granted.

3. That a copy of this recommendation be attached to the Trust Fund document.

The report of the Trust Fund Com-

mittee with recommendations was adopted.

Respectfully submitted,  
VERNA M. RICE, Chairman  
IDA TEDFORD ELLIS  
GERTRUDE L. FIFE, Treasurer

## REPORT OF PLACEMENT BUREAU COMMITTEE

The National Association of Nurse Anesthetists appointed a Committee to study and report on the advisability of operating a Placement Bureau at National headquarters. The Committee has made inquiries in regard to other Placement Bureaus and together with Miss Willenborg has reviewed the applications at Headquarters. In reviewing these applications, the Committee finds the ages of the majority of applicants ranging from thirty-five to fifty-two years, and in applying for positions they are making many stipulations as to working conditions; such as limited hours; anesthesia only; and they refuse to do relief work.

The delay in placing these people is not a result of our influence nor is it a policy developed by our organization. The restrictions in regard to the type of position desired by the applicants plus the tremendous amount of detail and the insufficient material to work with bring about very ungratifying results. The correspondence is tremendously heavy as the information in regard to the position and the qualifications of the applicant must be ob-

tained. It is almost impossible to acquire sufficient information to satisfy both the institution and the applicant.

There are many active placement bureaus, schools of anesthesia and hospitals placing anesthetists, and in many instances they are handling the same applications that come to our Headquarters. In view of these facts and the short history of our organization, it would appear that a Placement Bureau would be much more beneficial at some future date.

The Committee is taking the liberty of suggesting to the Board of Trustees that headquarters refer inquiries for positions from our members to the Placement Bureaus now functioning that are most eager to cooperate with other associations in placing applicants. These bureaus are organized to accommodate the nurse anesthetist as well as applicants from various other organizations who resort to this type of service.

Respectfully submitted,  
MAE B. CAMERON, Chairman  
LEONE MYERS  
EDITH MCGINLEY

## NOTICES

Separate reprints of any article published in the Bulletin may be obtained from National headquarters at a price of 10 cents each.

Members are asked to pay 1939 dues immediately upon receipt of bill if they wish to receive each issue of the Bulletin promptly. Bulletins will not be mailed to members who remain in arrears.

## MEASURES ADOPTED TO INCREASE REVENUE

The following recommendations were made by the Board of Trustees, were acted upon separately and after discussion were accepted by a vote of the general assembly:

1. Increasing the active membership dues to \$6.00, dividing this increase so that the National Association receives \$4.00 and the State Association \$2.00 in the organized states.
2. Increasing the Associate membership dues to \$3.00; \$1.25 remaining in the State Association treasury in the organized states and the remainder going to the National.
3. Increasing the initiation fee to \$2.00.
4. Increasing the price of pins from the present price of 75c to \$1.00.
5. A Registration Fee of \$1.00 to be charged at all future conventions.

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LOUISE SCHWARTING  
Trustee



## OFFICERS ELECTED FOR THE YEAR 1938-1939

President	Miriam G. Shupp Strong Memorial Hospital, Rochester, N. Y.
First Vice-President	Hattie Vickers Vanderbilt University Hospital, Nashville, Tenn.
Second Vice-President	L. Rose Littel Minneapolis General Hospital, Minneapolis, Minn.
Third Vice-President	Ora Lee Mercer 207 Medical Arts Bldg., Fort Worth, Texas
Treasurer	Gertrude L. Fife University Hospitals, Cleveland, Ohio
Trustees	Agatha C. Hodgins, Honorary President Chatham, Cape Cod, Mass. Louise Schwarting Lutheran Hospital, Fort Dodge, Iowa

## STATE ACTIVITIES REPORTED AT THE ANNUAL MEETING

### COLORADO

Although the Colorado Association is young, having been organized only two years, and our members widely scattered, we feel that we have accomplished some of our objectives and that great benefits have been derived from the group contacts. We especially thank the National Association for its interest, help and inspiration.

The last meeting was held August 31st at the Presbyterian Hospital, Denver. The following took part in the program:

Louise Bowden,  
"Divisional Doses of Avertin"

Mrs. Ann Stevens  
"Discussion of Factors Affecting Quality and Quantity of Anesthetic Agents"

Mrs. May M. Carpenter  
"Attitude of the Medical Profession toward Nurse Anesthetists"

Ethel F. Currie  
"Postmortem Report of Two Deaths on Operating Table, Cyclopropane Anesthesia"  
"Anesthesia in High Altitude"

At this meeting Miss Louise Bowden, 675 Albion Street, Denver, was appointed Secretary-Treasurer to complete the unexpired term of the late Sadie Louise Heckert.

(Ethel F. Currie)

### FLORIDA

Two meetings were held during the year—one in Tampa in November, 1937, and one in Orlando in April, 1938. The next annual meeting will be held in Orlando in November, 1938, at which time the election of officers will take place.

#### Treasurer's Report

Balance on hand January 1, 1938.....	\$ 20.35
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##### *Receipts*

Dues received from active members.....	115.00
Initiation fees .....	10.00
Refund from National Association.....	3.75
	_____ \$ 149.10

##### *Disbursements*

Dues transferred to National Association.....	62.50
Initiation fees transferred to National Association	10.00
Office expense .....	9.11
	_____ 81.61
Balance on hand.....	\$ 67.49

### Report of Membership Committee

Active members January, 1938 .....	14
Associate members .....	2
Transfers to other states .....	2
New members accepted.....	8

(Ida Tedford Ellis)

### MINNESOTA

Eight monthly meetings were held in Minnesota during the past year (omitting June, July, August and December). Since the larger number of members reside in Minneapolis and St. Paul, all the meetings were held there with the exception of the last meeting, which was a delightful picnic held in May on the banks of the Mississippi River at Red Wing, sponsored by St. John's Hospital, Red Wing.

Ten new members were added during the year, our membership now totaling fifty-nine. Two bulletins were published during the spring for the purpose of acquainting the absent members with affairs which had been transacted at the meetings, and in an effort to stimulate interest in the organization. The bulletins were accepted with enthusiasm and this year it is planned to appoint a Publishing Committee.

At several of the meetings each member was asked to bring one or more written questions, which were answered and discussed by the group. In this way many interesting cases were brought to our attention. Some very good moving pictures were shown—on travel, industry and anesthesia. This year we plan to have a bridge party and perhaps a picture show, with a small admission charge to raise money to send a delegate to the annual meeting in Toronto in 1939.

The Program Committee presents a special program following each business meeting. These meetings are held in the various hospitals of the Twin Cities and are always concluded with a social gathering and a light lunch. The average attendance is about twenty-eight or thirty. A marked increase of interest in the organization has been evidenced in the past year.

(Hazel J. Peterson)

### OREGON

The second annual meeting of the Oregon Association was held at St. Vincent's Hospital, Portland, in December, 1937, and officers elected for the ensuing year. Eleven new members have been added, making a total of fifty-one (including three associate members).

At the monthly meetings, lectures were given by doctors outstanding in the profession, and round table discussions followed. During the winter a series of lectures on the heart was given by A. M. Davis, M.D., which proved very instructive to the members.

The second annual banquet held in Portland in June was also well attended. We plan to continue this yearly event as it marks the closing of the winter series of meetings and lectures.

(Mabel A. McElligott)

### PENNSYLVANIA

The Pennsylvania Association held an organization meeting in 1931 but it was not until 1934 that the state was properly organized and placed on a fully

functioning basis. At that time we had to the best of our knowledge a recorded membership of 47, with \$6.69 in the treasury. Today we have a membership of 235 active, 8 associate and one life member.

In 1935 we became affiliated with the National Association. In 1936 we discussed the advisability of applying for a charter and after considerable inquiry and discussion we abandoned the idea because we felt there was nothing tangible to gain.

Needless to say, we are very proud of our organization in Pennsylvania. We owe the success of our organization to a large extent to the National officers. In 1934, when we transferred headquarters to Philadelphia, the National officers co-operated with us and gave great assistance in arranging and completing our records.

In 1934 every hospital executive in the state of Pennsylvania was contacted and asked to give us the names of their anesthetists. The response was excellent, and after getting in touch with the anesthetists our membership increased by leaps and bounds.

The monthly meetings in the District of Philadelphia have met with tremendous success.

The Pennsylvania Association of Nurse Anesthetists meets annually with the Pennsylvania Hospital Association.

(Rose G. Donovan)

#### Tennessee

Total membership	51
Active	50
Associate	1
Application blanks mailed during the year	75
Applications approved and accepted during 1938	11
Applications now pending	5
Letters written regarding Association matters	350

We have no member delinquent in payment of 1938 dues.

There have been monthly meetings of the Board of Trustees, and we have had very active and cooperative committees during 1938.

During the year the Secretary has contacted personally every known nurse anesthetist in the state, sending them application blanks and urging them to apply for membership in the National and Tennessee Nurse Anesthetists' Associations.

(Jean O'Brien)

#### VIRGINIA

After this next year we hope to have our Association affiliated with the Tri-State Hospital Association, which includes North Carolina, South Carolina and Virginia. Up to this time we have not felt that the Virginia Association of Nurse Anesthetists was so organized that it would be a credit to the Nurse Anesthetists' Association to meet with the hospital group.

In the state we have two local Associations that are very active—the Tidewater Association and the James River Valley Association. I feel that it is essential to form local associations within the state.

There is \$181.99 now in the treasury.

Our next meeting, including a banquet, will be held at the Monticello Hotel, Norfolk, Virginia, on December 3rd.

(Virginia Godbey)

## WISCONSIN

The regular meetings of the Wisconsin Association were held on January 10, 1938, at Milwaukee Hospital, March 14th at Deaconess Hospital and May 9th at St. Mary's Hospital. At the March meeting the proposed assessment to be levied upon the membership for the purpose of creating a larger treasury was decided against. The recommendation that a change be made in our constitution, providing for three yearly meetings (the annual meeting in November, and one meeting each in February and May) was accepted, to be acted upon at the next annual meeting. Miss Martha M. Magnin was elected as delegate to the National convention in Dallas and Miss Evelyn Hurff as alternate.

At the May meeting plans for the annual meeting to be held in Milwaukee in November were discussed and committees appointed. Miss Magnin gave an excellent paper on avertin, and Miss Cameron read a brief paper on cyclopropane and also gave a report on the Anesthesia Section of the Tri-State Hospital Association in Chicago.

(Martha Magnin)

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The following states gave a report of activities, which was read by a representative of the State Association, but the information contained therein has been published in general in previous issues of the Bulletin:

### Jottings from the Reports

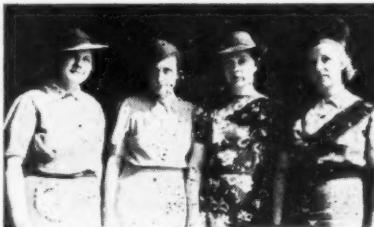
Alabama	Fourth state to organize—December 19, 1931 (Irene O'Curran)
California	Meeting held every two months except in vacation period (Mary J. Roche Stevenson)
Indiana	Next year we hope to send a delegate to the National Convention (Agnes M. Lange)
Mississippi	The annual meeting will be held in May, 1939, in conjunction with the Mississippi Hospital Association (Emma Easterling)
Nebraska	We are very happy to have a state organization and proud to be a part of the National (Agnes G. Hain)
New York	The next meeting will be held in New York City in May, 1939, at which time the World's Fair will be in full swing. If members of the National from other states are in New York at that time we will be happy to have them join us during the convention (Cora McKay)
Ohio	Four members only in Ohio have not paid 1938 dues (Alice Barth)
Oklahoma	The next meeting will be held in conjunction with the Oklahoma Hospital Association (Julia Loftus)
Texas	Eighteen new members for 1938. (Elvie Shaver)

## COMING MEETINGS

The annual meeting of the Tennessee Nurse Anesthetists' Association will be held at Hotel Peabody, Memphis, Tennessee, on February 15th and 16th, 1939.

For further information write Miss Jean O'Brien, Secretary-Treasurer of the Tennessee Association, 869 Madison Avenue, Memphis, Tenn.

The annual meeting of the Mid-South Post Graduate Nurse Anesthetists' Assembly will be held at the Hotel Peabody, Memphis, Tenn., February 15 and 16, 1939. For further information write Miss Alice Maurine Sims, Secretary, 704 Goodwyn Institute, Memphis, Tenn.



Velma Thompson Sallie Knight Lucia Riek Dorothy Hoadley

TEXAS ANESTHETISTS  
(Snapped at meeting)

## ALUMNAE MEETING

The annual meeting of the University Hospitals of Cleveland (Lakeside) School of Anesthesia Alumnae Association was held at 4:30 P.M., Tuesday, September 27, 1938, in Dallas, Texas, and the following officers were elected:

President	Myra Anton Van Arsdale St. Luke's Hospital, Cleveland, Ohio
Vice-President	Clara A. Moore St. Alexis Hospital, Cleveland, Ohio
Secretary	Ruth Graff University Hospitals, Cleveland, Ohio
Treasurer	Kay Sheehan Charity Hospital, Cleveland, Ohio

A copy of the minutes of the meeting will be sent to each member.

Thirty members and guests gathered for luncheon on Wednesday, September 28th at the Hilton Hotel. The reading of a telegram of best wishes from Miss Agatha C. Hodgins added to the pleasure of the occasion.

We were particularly honored to have Hilda R. Salomon, Past President of the National Association of Nurse Anesthetists, as the guest speaker, and her remarks as always were very inspiring.

A paper prepared by Mary Vine Allison, Meriden Hospital, Meriden, Conn., was read, on "What My Training at Lakeside Has Meant to Me." Miss Allison's paper included an interesting report of a series of cyclopropane anesthesias and her results.

Gertrude L. Fife, Director of the school, gave a short report of its activities. Mrs. Fife acknowledged with grateful thanks the gift of eight books for the school library donated by the Alumnae Association in 1938, and individual contributions by the following recent graduates:

Rita Bolden  
Esther Pracejus  
Eloise Fisher  
Winifred Kelley  
Frances Kocklauner  
Florence Macha  
Marie Therese Dubalen

Mrs. Fife stressed the great help that had been given to the school by the Alumnae Association and urged other schools of anesthesia to organize their Alumnae. She suggested that as a part of each year's National program a group luncheon for Alumnae Associations be held and that at the luncheon the Director of each school give a brief report of the school's activities.

#### **FORM OF BEQUEST OR CONTRIBUTION**

In response to inquiries reaching the headquarters of the National Association of Nurse Anesthetists the following form is suggested as a proper one to follow:

"I give, devise and bequeath to the National Association of Nurse Anesthetists' Trust Fund the sum of.....  
..... dollars, or property or holdings  
as follows:

All income from the Fund known as the National Association of Nurse Anesthetists' Trust Fund will be used for the aged and indigent nurse anesthetists who qualify for participation in the benefits of said fund as stated in Trust Fund Document.

Signed.....

(Address in full).....

Date.....

## A DOUBLE MONAURAL STETHOSCOPE FOR ANESTHETISTS

FREDERICK W. NIEHAUS, M.D.

AGNES HAIN, Anesthetist

Omaha, Nebraska

During anesthesia it is frequently desirable to listen to the heart sounds, and to take the blood pressure readings. With the double monaural stethoscope herewith described, this is possible with a minimum of apparatus. By following trade practices, rather than the dictates of philology, this might be

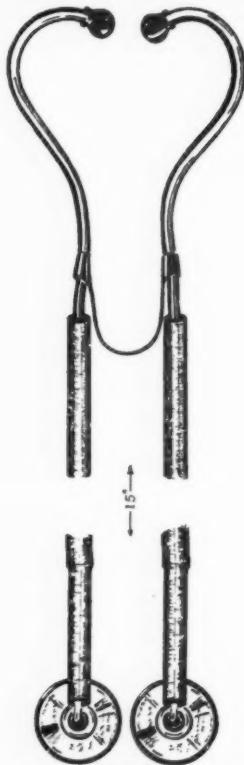


Fig. I

called an "anesthoscope." A similar instrument has been described by Nicolai<sup>1</sup> for other auscultatory purposes.

This stethoscope is illustrated in Fig. I and needs no further description. Its use is shown in Fig. II. The bell, trans-



Fig. II

mitting the heart sounds, is placed on the precordium at a site where these sounds can be heard distinctly, and fastened securely by adhesive tape. The other bell is fastened by an elastic band in the right antecubital space. The blood pressure cuff is applied in the usual manner. Obviously both bells are located before the patient is draped. During use the sounds originating at the heart are heard with the left ear, and blood pressure readings are taken with the right ear. It is less confusing to remove the ear piece from the auditory canal of the ear which is not listening. However, with experience, concentration on one sound or another, obviates the necessity of removing either ear piece.

By use of this instrument disturbances of rate, rhythm and quality of heart sounds can be detected more easily than by palpating the pulse of the vessels of the face or neck. It is especially useful with the quiet respiration of spinal anesthesia. With inhalation anesthesia its use may be impaired by noisy respiration.

<sup>1</sup> Nicolai, L.: *Über das Stereostethoskop*. Klin. Wchnschr. 15: 91, 1936.

## THE RELATION OF THE ANESTHETIST TO THE HOSPITAL AND THE SURGEON\*

BRYCE L. TWITTY,

*Administrator, Baylor University Hospital,  
Dallas, Texas,*

The nurse anesthetist is very closely related to the hospital in many respects. The hospital is interested in her background—where she comes from, her personality, her social contacts and attitude. The hospital is interested in her ability to get along with other people with whom she is associated. The hospital is interested in the nurse anesthetist from practically every standpoint from which the anesthetist herself can be interested. The hospital has an investment in the nurse anesthetist, not only in her training but also in her personality because a nurse with the proper personality means much to a hospital. A nurse anesthetist who is able to get along with difficult people and situations is a Godsend to the hospital. Hospital administrators have learned to appreciate those employees who are in position to contact doctors and other employees and get on well with them, agreeably and satisfactorily in every way. Therefore the personality of a nurse has much to do with her success as a nurse anesthetist. I would suggest that all of us do everything we can to develop our personalities, especially the positive phases of our personalities. There is nothing more vexing to a hospital administrator than friction among the personnel. There is nothing that tires him, takes his strength or drags him down like a fight

between two departmental heads. The nurse anesthetist, therefore, must know how to get along with the operating room supervisor, with the great surgeon and other employees on the operating room floor.

The nurse anesthetist is a mediator between the patient and the surgeon. She is the one to contact the patient first when he comes to the operating room. Her gentle, kindly appearance and gracious attitude will do much to smooth down the ruffles of the patient and add assurance and satisfaction to his state of mind. In this way she helps the doctor very much. Therefore we do want to support these women because of their tremendous responsibility in this connection. It is the nurse anesthetist who gives the SOS signal to the surgeon when things go wrong. One needs only to see the anesthetist, in the case of brain surgery, constantly watching the pulse and heartbeat of the patient and keeping her eye on the surgeon, to know the great amount of responsibility and dependability the surgeon puts upon the anesthetist who understands the importance of the nurse anesthetist to the surgeon. Hospitals are vitally concerned here, because hospitals, as public health officials, are greatly concerned in everything that adds to the safety of the patient, and the welfare of the doctor and the hospital. The

\* Read at the sixth annual meeting of the National Association of Nurse Anesthetists held in Dallas, Texas, September 26-30, 1938.

nurse anesthetists have been a great help to these hospitals in their fine work.

From a financial standpoint the nurse anesthetist is a great help to the hospital. If she is careful in the use of the anesthesia materials and conservative in dispensing them she can add much to the income of the institution. In watching the overhead of her department she can return a nice profit to the hospital which can be used for the extension of service and thereby make it possible to add equipment to the institution the better to serve its constituents. The Anesthesia Department has proved to be a splendid source of income to the institution and the nurse anesthetist has been a great help in cooperating in this way. That is one reason hospital administrators have paid nurse anesthetists well. You will find as a rule that they draw a higher salary in comparison with other professional women. Their demands are met by the hospital because the hospital is happy to pay these young women for their work. We are closely related to them from an economic standpoint because hospitals have to pay their way. When people pay the hospital they are reimbursing the hospital for service rendered and there is an ever-present problem of making both ends meet, financially speaking, in practically all hospitals and the nurse anesthetist has been a help in this respect. Her relations to the hospital from an economic standpoint are very close therefore and the hospitals are

appreciative of these women and their help.

The hospital is interested in the personnel of the Anesthesia Department. In a hospital averaging from 250 to 300 patients a day there should be at least four full-time anesthetists besides the Director. The Director should have charge of the training school and the Anesthesia Department and should be allowed time to study and improve himself constantly. The hospital should be interested in seeing that the Director does have time to devote to study and research. It is very necessary that the anesthesia department be in position to do at least a reasonable amount of research in this fast growing science. The great steps in anesthesia that are being made day by day would not be possible except for research, and every hospital should be interested in its anesthesia department doing some research work. In addition to the Director there should be an assistant director and a second assistant director and then the regular graduate service in addition to the students. The anesthesia department should be well organized.

The hospitals are greatly indebted to this fine profession for the wonderful work it is doing, the cooperation we are receiving from the anesthetists, and the splendid service that is being rendered the public. As a hospital administrator I want to go on record as favoring the nurse anesthetists and want them to know that I am their friend and stand ready to help them at any time.

## RELATION OF THE ANESTHETIST TO THE HOSPITAL AND THE SURGEON\*

CHARLES W. FLYNN, M.D.

*Surgeon in Chief, Baylor Hospital,  
Professor of Surgery, Baylor University Medical School  
Dallas, Texas*

Many developments have come into our hospital lives in the last forty years and not the least of these is the question of having competent anesthetists. A surgeon is deeply concerned as to who is giving the anesthetic and whether the anesthetist is competent to deal with the various types of anesthesia.

Medical science has made tremendous strides in the last few decades and anesthesia, being an integral part, has progressed in proportion. We no longer think of anesthesia as simply a means of alleviating painful impulses. It has advanced far beyond that and encompasses much more than the thought expressed by the late Sir William Osler, "Anesthesia is the greatest single gift ever made to suffering humanity; at a single stroke the curse of Eve was removed." Anesthesia today must align itself with the proficiency of surgical technique in affording the patient an uneventful and rapid post-operative recovery.

The following is a quotation from Lanfranc uttered thirteen hundred years ago: "No one can be a good physician who has no idea of surgical operations, and a surgeon is nothing if ignorant of medicine." This theme may well be used here, substituting anesthetist for physician. The modern anesthetist, to be competent, must have a good general understanding of the

principles of the basic sciences and of a general surgical technique. From pharmacology may be learned the action of narcotics, stimulants, and depressants; from physiology a study of respiration, the circulation and local tissue reaction.

The surgeon can anticipate that his anesthetist will have this basic foundation as well as the ability to recognize the poor risk patient; to foresee emergencies and the skill to combat them. On the other hand, "a surgeon is nothing if ignorant of anesthesia." There is no greater truism. Consider if you will a surgeon attempting to practice his profession and never having given an anesthetic, and having very little or no knowledge of the principles of anesthesia. I do not imply that the anesthetist must be a licensed physician, although this might be an ideal situation. Neither do I hold that the surgeon must be a registered anesthetist, but the surgeon of today must have a basic foundation and some practical experience in the administration of anesthetics. This is imperative in order to secure full cooperation and understanding in the best interests of the patient.

Both the surgeon and the anesthetist must strive to promote cooperation and teamwork. One is indispensable to the other and every effort should be made to pull together. Some surgeons are prone to begin the operation too

\* Read at the sixth annual meeting of the National Association of Nurse Anesthetists, held in Dallas, Texas, September 26-30, 1938.

soon, thus upsetting the patient and the anesthetist. A change in operative plans should be transmitted immediately to the anesthetist as she must change her technique when the operative site is shifted, for example, from the lower to the upper abdomen. Likewise a request from the anesthetist to the surgeon to pause a moment and allow the patient to recover anesthetic balance, should be heeded promptly and in the right spirit.

The type of anesthesia to be given a patient should be decided by the surgeon and not the anesthetist (although consultation is often desired). The surgeon is in a position to know what anesthetic is best for the patient. Frequently this is expressed in the broader sense—as general or spinal anesthesia, with no mention of the particular agent. If he is not able to translate that knowledge into terms of anesthetic drugs he must depend upon the judgment of the anesthetist. The surgeon and anesthetist should be able to exchange ideas and advise each other as to the choice of the anesthetic. The surgeon should be able to depend on the anesthetist's judgment and skill in the administration of anesthetics and the conscientious anesthetist so commissioned should be ready and willing to share his or her part of the burden.

The anesthetist's duties in relation to the surgeon should not begin and end in the operating room but should begin before the patient comes to surgery. Of course in the average case where the patient is in good condition, or for a minor operation, this is not practical, but in dealing with some of the major procedures and in patients desperately sick the anesthetist should visit the patient in the room, making whatever examinations are necessary and expedient. She should be familiar with the essential points of the history of the

patient and what operation is to be performed. An examination of the graphic chart for temperature, pulse, respiration and blood pressure, and of the x-ray or laboratory tests, is necessary in order to sum up the general condition of the patient and be better informed as to the type and amount of anesthesia required.

The success of the anesthesia sometimes depends upon the preoperative medication. There should be an understanding between surgeon and anesthetist as to when and how much preoperative sedation is given. At times the surgeon is remiss in his duties to order sufficient premedication given in ample time for the patient to have had the full physiologic effect. For example, morphia has its maximum effect in about one hour. With other anesthetics, such as avertin, the anesthetist has the sole responsibility for mixing, administration and supervision during operation.

The role of anesthetist assumes important proportions in certain individual cases, for example the hyperthyroid who is being carefully prepared before operation. The anesthetist should make a point of visiting the patient several days before operation and in this way gain the patient's confidence so that their meeting in the operating room will not be too formal. This is a task which takes a great deal of tact and artistry on the part of the anesthetist and again means so much in the treatment and the successful outcome of the operation. Before beginning an anesthetic the anesthetist should examine the patient's mouth and nose to be sure there is no respiratory obstruction. She should inquire as to removable bridges and plates and have them removed to safeguard against possible aspiration.

The anesthetist is directly responsi-

ble to the surgeon for the administration of the anesthetic. If and when the surgeon specifies the type of anesthetic to be given he or she should administer it to the best of his or her ability. If the patient does not receive the anesthetic well it is the duty of the anesthetist to communicate this fact immediately to the surgeon and either request or advise that a change be made. She should be skilled in the administration of the anesthetics so that everything goes smoothly and the surgeon can devote his entire attention to the operative field. The anesthetist must occasionally advise with the surgeon as to whether the operation be continued or stopped and postponed until a later date. She must be equipped to handle any emergency which arises, to suggest intravenous medication, stimulation, sedation, artificial respiration, tracheotomy, et cetera. Not infrequently the responsibility rests upon her whether the operation will be continued to a successful termination. While the surgeon assumes full responsibility for the patient's care, he delegates a certain amount of this to his anesthetist. Anesthesia has reached a stage in its development where the surgeon can expect and rely on a safe anesthesia, carefully given by a trained anesthetist.

No man should operate who is incapable of handling complications following any type of anesthesia. I do not believe that the anesthetist should be given full charge of treating these complications, but the anesthesia department should keep these patients under observation and when difficulties do arise they should be capable of offering assistance to the surgeon in charge.

Frequent reference is made to the pleasing and winning personality of certain individuals, and certainly in no

field of endeavor do I know of a place where personality plays such a vital part. Those of you who have been in the patient's "shoes," and I have, recall only too vividly the sensation you experienced in that memorable visit to the surgical amphitheatre and how soothing and restful it was to have the anesthetist speak quieting and confidence-inspiring words into your ear and to be gently lifted and float into the oblivion of unconsciousness. Compare this with the awkward, inattentive or disinterested and uncooperative anesthetist who may push a gas mask into your face and literally pull and drag you from your already unhappy conscious state into a substratum of fear and wild excitement. This same indefinable something is again important in the highest degree in the management of children. These little ones who undergo operations with fear and trembling and frozen hearts can be won so easily by that kind and sympathetic personality. I have seen local and spinal anesthesia used with perfect success on children, mainly because the anesthetist had their fullest confidence.

In the Manual of Hospital Standardization by the American College of Surgeons is the following: "The administration of anesthetics in hospitals should be improved by employing so far as possible, qualified, experienced persons to give anesthetics rather than using inexperienced physicians, resident medical officers or nurses without, in some instances, proper supervision." Anesthesia is an important service in the hospital. Every hospital should have an efficient anesthesia department with well-organized and well-trained personnel. The chief of the department should have the same relation to the hospital as the chief of the surgical staff. He must have full and complete charge of his section comparable

to other departmental heads. He owes a responsibility to the surgeon and the hospital to keep abreast of the recent advances, and to secure adequate and necessary equipment for his department in order to render satisfactory service. In a teaching hospital he will have assignments in the medical school and hospital curricula, for the teaching of students, nurse anesthetists and internes.

Some of our states require of their applicants for medical license, a specified and supervised service on anesthesia as a specialty. This brings the Chief of the Anesthesia Department into closer relationship to the hospital and hospital interne staff. At the conclusion of the year he must certify that each interne was properly supervised in the induction and maintenance of a certain number of anesthesias.

It must be remembered that the instruction of student or graduate anesthetists does not begin and end in the operating room. They must have practical training in the wards and at the bedside, with preoperative instruction as to the evaluation of the patient as a surgical risk. They must be taught preoperative medication and the type of anesthetic agent to be used. The instruction must also cover a postoperative study of the various complications which may arise and their management. We expect from the hospital training facilities for teaching student nurses and graduate anesthetists. There should be proper equipment to give adequate service. There should be at least a graduate medical supervisor with a capable staff of trained assistants. The nurse anesthetists who act as assistants and frequently carry the brunt of the work should be paid a good living wage. There should be sufficient help so that a few anesthetists are not overworked.

The hospital has a right to expect that the Chief Anesthetist shall report to the Director of the hospital the needs of the Anesthesia Department and any new apparatus or anesthetic which has been developed. The anesthetist should be advised when he enters the hospital to whom he is responsible, and any difficulty that may develop with the staff or the operating force must be adjusted with the Director in conference.

One important duty in relation to the hospital is the keeping of accurate records. The hospital demands this in order to keep its standing. Aside from this reason, every anesthetist should take pride in her work and have a desire to put her findings and results on paper. In order to improve herself and show clearly that her added efforts have borne fruit she must of necessity keep detailed accounts of her work. These should begin with preoperative notes on the condition of the patient, the preoperative medication, the effects of the anesthetic and then a personal postoperative check-up. In this way only can the anesthetist review her previous work and make an accurate evaluation of her success. Incidentally, such carefully kept records are useful to the hospital. If after so long a time she can analyze so many thousand cases and demonstrate that a certain procedure gives the patient the safest anesthesia, gives the surgeon the most relaxation, and is more economical in gas consumption, she has done a valuable service to all concerned.

There is a great deal of controversy and a number of articles are appearing at this time regarding the question of physician versus nurse anesthetist. They both have their advantages as well as disadvantages. It is impossible to discuss this problem at great length within the scope of this paper, but suf-

fice it to say the author believes a good nurse anesthetist thoroughly trained is equal to a medical anesthetist, and for the common inhalation anesthetic they are superior.

Better anesthesias go hand in hand with better teaching and we should strive toward this end—more institutions where anesthetists may receive proper instructions.

## PENTOTHAL SODIUM—ITS USE IN MAJOR SURGERY\*

ANNE BEDDOW

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The induction of general anesthesia by intravenous injection naturally elicited marked apprehension on the part of one who definitely leaned to the administration of anesthesia by inhalation. It was with great reluctance that the needle was inserted for the administration of the first fifty cases, and I was constantly on the alert for sound and convincing reasons which I felt would eventually appear to prove that the inhalation method of anesthesia is the safest and most satisfactory method. It was difficult to believe that an agent introduced into the blood stream, producing surgical anesthesia so quickly could possibly be a safe anesthetic.

Before attempting the use of pentothal sodium as an anesthetic agent on human beings, experimental work was done in the animal laboratory. Minor work was first attempted and then cholecystectomies and appendectomies were done on dogs. In the animal study it was found there was little effect upon the heart action unless respiration was depressed to the point where there was no respiratory exchange. The irregularities disappeared when respirations were resumed.

Following the work in the animal laboratory we administered pentothal

sodium for the reduction of simple fractures, opening of abscesses and other types of cases where a short anesthesia was desired. We were so favorably impressed that we gradually worked into more general minor surgery and then major. During the early cases, minor disturbances occurred, which were to be expected in the mechanics of inaugurating a new experience. After a satisfactory technique and the art of administration had been developed, the disturbances were eliminated and its administration became a fascinating study, the post-operative recovery being observed with keen interest and enjoyment. After the administration of 3,559 anesthetics, it is my belief that sodium pentothal, properly administered in selected cases, fills a foremost place in the present era of surgery and anesthesia. Pentothal sodium is administered by fractional method and when skillfully handled may be termed a controllable anesthetic. It is one of the lighter barbiturates, is katabolised with marked rapidity and apparently leaves no ill effects. Its popularity in our city has spread to the point where patients request its administration and surgeons have had to consider its use in order to satisfy

\* Read at the sixth annual meeting of the National Association of Nurse Anesthetists, held in Dallas, Texas, September 26-30, 1938.

their patients. The fact that the patient does not have to experience the unpleasantness of having something placed over the face has added to its popularity. The patient loses consciousness as pleasantly as in falling into a natural sleep, occasionally yawning and with a pleased, tranquil expression. The recovery period is based upon the amount of the drug administered. The patient will usually arouse soon after the operation if spoken to and then return to a sleep, lasting from one to two hours and awaken as though from a natural slumber. The absence of nausea is markedly noticeable and the patient is able to tolerate liquids at least twenty-four hours earlier than with other anesthetics. Due to the fact that sufficient relaxation is obtained, the use of abdominal packs and the handling of the intestines is minimized, thereby greatly reducing the subsequent discomfort of gas pains.

The degree of relaxation is comparable only to that of spinal anesthesia, and the surgeon is therefore able to reduce the time of operation approximately 50 per cent, which adds to the safety of the patient and shortens the recovery period. The electric cautery may be used and there is no need for concern in regard to humidification as with anesthetic gases.

Regardless of all that may be said in favor of the many advantages of pentothal sodium as an anesthetic agent, its dangerous possibilities must not be minimized. It should not be used as an office anesthetic, and should be administered only by the skilled anesthetist who has the proper facilities at hand to administer the drug properly. The following equipment is necessary:

A gas machine for the administration of oxygen

A table containing the other equipment is placed at left of anesthetist

A sterile package, containing a towel, a 20 cc. B.D. glass syringe with eccentric tip and 3 rustless steel needles containing stilettes  
A 4 ounce flask of sterile, doubly distilled water

A small jar with lid, containing sponges in alcohol

A small uncovered container for used sponges

A small and a large metal air-way

A box of cardiac and respiratory stimulants

One ampule of 1.0 gram and 2 ampules of 0.5 gram Pentothal Sodium

A No. 18 rubber catheter

Tube of lubricant

Small spool of adhesive tape.

An arm board having an adjustable strap at wrist is placed under the table pad, even with the patient's shoulder. A small rubber-covered pad with towel is placed under the arm on the board. The blood pressure cuff is placed well up on the arm and attached to the manometer on the gas machine. While the patient is being prepared, the solution is mixed. In order to avoid keeping the patient under the anesthetic longer than is necessary, the induction is not made until the surgical preparation is completed. This does not apply to highly sensitive patients or patients in the dorsal position.

For a major case, the 1.0 gram ampule is filed, the top removed carefully, and the ampule filled with 20 cc. of the distilled water. Pentothal sodium is a yellow crystalline powder which dissolves readily and has a sulphur odor when first opened. The solution should be perfectly clear, without precipitate.

The solution is drawn into the syringe with the larger needle and after the air is expelled, is replaced by a smaller one. The vein selected is usually the median basilic in the ante-cubital fossa or a metacarpal vein in the back of the hand. In obese patients where the veins are obscure, the great saphenous vein anterior to the internal malleolus may be used, providing there are no varicosities in the leg. After the site has been properly prepared, the needle is introduced into the vein. As soon as blood appears, the pressure which has been placed at 100 mg. is released and the patient is instructed to count slowly and audibly. As slowly as the plunger may be pushed forward, the solution is injected, closely watching the patient for any untoward symptoms. When the patient stops counting, a slight pause is maintained and the surgeon pricks the skin with the scalpel. If there is no reflex he continues to make the incision and to proceed with the operation.

The jaw is relaxed and must be held by an assistant who is trained to hold it properly to maintain a clear airway, to take the blood pressure and to record the pulse and respiration. When anesthesia is obtained, a soft rubber catheter attached to the gas machine is inserted in a nostril and held in place with adhesive. Before beginning the anesthetic the distance from the tip of the patient's nose to the distal side of the ear is measured with the catheter, and marked, indicating the depth to be inserted. The oxygen is started immediately at 15 per cent and increased as indicated by the color of the patient. If there is difficulty in maintaining a clear airway, a metal airway is inserted and held in place by supporting the tip of the chin. The injection is made as the need is indicated, the needle being left in the vein.

After relaxation has been obtained, it requires very little of the drug to maintain an even plane of anesthesia. If the first ampule is not sufficient for the duration of the operation, the needle is left in the vein and the syringe withdrawn, a sponge is placed beneath the needle to protect the arm and a half-gram ampule opened and the syringe refilled. This necessitates the placing of a second needle on the syringe while it is being refilled, which is removed and the syringe attached to the needle in the vein. After the peritoneum has been closed, the anesthetic may be discontinued and the amount of oxygen increased.

Some advise against the use of preliminary medication but we have found that  $\frac{1}{4}$  grain of morphine and  $\frac{1}{150}$  grain of atropine sulphate administered thirty minutes before induction, lessens the amount of pentothal sodium to be administered and also shortens the postoperative sleep. The induction is smooth and dramatic, and the stages are so transitory as to be almost imperceptible. The respiration is shallow but not depressed, with markedly little change in the rate and rhythm. The pulse is quickened at first with an early return to normalcy. The eye changes are not dependable. Without medication, the pupil is slightly dilated and sometimes reacts to light. In surgical anesthesia, the eyeball may be fixed or may move slightly and in lighter anesthesia it moves actively. The changes occur rapidly, therefore the most reliable symptoms are the pulse, respiration and color. The shallow breathing is so quiet that it requires a great deal of experience in the administration of pentothal sodium to recognize the surgical stage. The absence of the respiratory exchange in the breathing bag on the gas machine is one of the greatest disadvantages to

be encountered. In the early use of the anesthetic, to offset this, a small cotton wick was held by the assistant near enough to the nostrils to be able to recognize more accurately the rate and depth of respiration. Animal experimentation revealed that failure of respiration and asphyxia may be produced before marked change in the circulatory system.

*Abdominal surgery* constitutes a greater part of the program in general surgery. In operations of the upper abdomen, where the gallbladder, spleen or pancreas is involved, a longer time is required to secure sufficient relaxation. The patient must be kept well oxygenated as with other anesthetics and if sufficient time is permitted for relaxation to develop, it is not necessary to pack off the viscera. Short paroxysms of hiccough sometimes occur, which are relieved with an inhalation of a mixture of 95 per cent oxygen and 5 per cent carbon dioxide.

*Pelvic operations*: In operations which require the Trendelenberg position, even with obese patients, it is seldom necessary to pack off the viscera to obtain a view or to work on the pelvic organs. In hysterectomy more than in any other type of operation, the change in the time required for operation has been most evident. The absence of sweating is conspicuous and aids in maintaining a sterile technique.

*Thyroidectomy*: Pentothal sodium has proven of particular value in the highly sensitive thyroid patient. The patient is instructed that a hypodermic is to be given and while under light anesthesia the field is prepared. In some instances phonation is present and occasionally a slight secretion of mucus. With the absence of nausea and vomiting, the recovery period is usually uneventful.

*Hemorrhoidectomy*: Complete relax-

ation of the sphincter muscle is obtained with pentothal sodium. The patient is placed on the abdomen, and one arm is extended on the arm-board for the injection. A special syringe having a curved glass tip about one inch in length is used to inject the solution into the vein on the under side of the arm. This type of case seldom requires more than 0.5 gram, with a generous amount of oxygen.

*Obstetrics*: Pentothal sodium is an ideal anesthetic when a forcep delivery or version is performed.

*Tonsillectomy*: In the first two tonsillectomies in which pentothal sodium alone was administered there was incomplete relaxation of the masseter muscles and also a slight cyanosis. In a series of twenty-four tonsillectomies performed later, in which a larger dosage of pentothal sodium was used with 35 to 50 per cent oxygen, the results have been most gratifying.

Included in the 3,559 anesthetics were

Appendectomy	682
Cholecystectomy	58
Forcep Delivery	104
Gastroenterostomy	20
Gastric resection	16
Hysterectomy	276
Thyroidectomy	39

#### LENGTH OF OPERATION

Minutes	No. Cases	Percentage
0-20	2034	57.15
21-30	819	23.01
31-40	230	6.46
41-50	207	5.82
51-60	123	3.46
61-80	89	2.50
81-100	36	1.01
101-120	8	.22
121-180	12	.34
181-Over	1	.03
	3559	100.

Age	No. Cases	Ethylene	21%
16 months—2 years	2	Ether	25%
2	10	Spinal	49%
3	14		
4	37		
5-10	163		
10-20	532		
20-30	1165		
30-40	840		
40-50	430		
50-60	193		
60-70	107		
70-75	27		
75-80	21		
Over 80	18		
	—		
Total	3559		

**AVERAGE BLOOD PRESSURE,  
PULSE AND RESPIRATION  
IN 2000 CASES**

	Blood Pressure	Pulse	Respiration
Before operation	120.3/76.6	85.6	21.5
During operation	119.8/78.7	93.0	21.6
After operation	117.2/80.2	90.1	20.4

**HYPERTENSION IN 3559 CASES**

Systolic blood pressure	140-200	200 or over
No. Cases	210	20

**AVERAGE BLOOD ANALYSIS IN  
25 NORMAL CASES**

	Blood Sugar Mgm.	N. P. N. Mgm.	Uric Acid Mgm.	Creatinin Mgm.	Coagulation Time—Minutes	Bleeding Time Minutes
Before operation	96.3	31.2	4.5	1.2	4.0	3.8
After operation	95.6	31.3	4.8	1.2	3.5	3.5

**“QUICK” Hippuric Acid Test of Liver Function**  
Comparing pentothal sodium with ethylene, ether and spinal anesthesia  
Decrease in liver function day following operation

**STUDY OF ELECTROCARDIOGRAPHIC CHANGES UNDER  
PENTOTHAL SODIUM  
ANESTHESIA**

Electrocardiograms were recorded on 40 patients

- 38 during operations (with sodium pentothal)
- 1 during operation (with gas)
- 1 during anesthesia (caused by sodium pentothal)

Electrocardiograms were recorded before operation, at intervals during operations and one to ten days after operation.

Age range: 2½ to 73 years

**FINDINGS:**

**Change in rate:** The change in rate cannot be studied because some of the electrocardiograms taken before operation were recorded in the patient's private room, where the patient was less excited and heart rate was slower.

**Change in rhythm:** In two instances frequent ventricular premature beats appeared immediately after the patient became anesthetized. Both patients were white women, aged 34 and 42 respectively. The premature beats were not recorded at any other time, but of course this might have been a coincidence.

One white male showed A-V nodal

rhythm before and one day after operation, and sinus rhythm while anesthetized.

*Change in form of complexes:* Changes noted were:

Change in form and lowering of T waves

Inversion of T waves when already low

Tendency of T wave to become upright when inverted

Change in electrical axis

Lengthening of Q-T interval

*Conclusions:* Most patients show very little or no electrocardiographic changes during anesthesia, especially since oxygen has been used continuously. In those instances where changes are noted, they are only transitory and the electrocardiogram returns to the same form it was before anesthesia. A more extensive study should be made especially in older patients and in those whose electrocardiograms show evidence of myocardial disease.

## THE TRAINING OF THE NURSE IN ANESTHESIA\*

HATTIE VICKERS

Nashville, Tennessee

When Miss Hoadley asked me to appear on this program, taking as my subject "The Training of the Nurse in Anesthesia," I thought immediately of the recommendations of the Educational Committee and of the splendid paper given by Miss Muller at the Saint Louis meeting, and wondered what could be added. While I may not be able to contribute anything new, I hope this brief paper will serve at least to provoke an interesting discussion.

A hospital offering to nurses a course in anesthesia should be one doing general surgery, which should include peroral endoscopy, thoracic and neurosurgery, and one with a department of obstetrics and dentistry. If the hospital is affiliated with a medical school, a library is usually available. If not, a reference library should be furnished the Anesthesia Department.

The instructor should be a woman with special interest in teaching, one who keeps abreast of the latest developments. This makes it essential that she should study the literature, attend

conventions and visit other clinics. In order to direct the work of the students and to impart to them her knowledge, the instructor should possess teaching and executive ability. She has the chief authority in her department, which should be managed with sufficient tact to avoid friction, not only in her own service, but with members of the other services. She must avoid all evidences of partiality by maintaining toward all students the same attitude, not permitting personalities to sway her likes and dislikes. Above all she must remember that she is dealing with another professional woman. The majority of students desire to give their best, but to give their best they must feel that they can ask questions and contact their instructor concerning any and all problems. The instructor should remember just how foreign these problems were to her as a beginner; how difficult it was for her to hold a mask properly so as to prevent obstruction; how her arms felt numb for hours when she had not been able to

\* Read at the sixth annual meeting of the National Association of Nurse Anesthetists, held in Dallas, Texas, September 26-30, 1938

relax and be comfortable on account of the strain under which she was working.

In Aesop's fable, "The Wind and the Sun," a dispute arose as to which was the stronger of the two, and it was agreed to settle the issue upon this point—which could soonest make a traveler take off his cloak. The wind blew and blew; the traveler only buttoned his coat more closely around him. Then the sun smiled on the man and off came the coat! The sun was declared the conqueror; thus it has ever been deemed that persuasion is better than force, and the sunshine of a kind and gentle manner will sooner lay open a man's heart than all the threatening and force of blustering authority.

A nurse who is a graduate of a recognized school of nursing should have the fundamental knowledge necessary for the study of anesthesia, but to become a successful anesthetist she should also have shown certain qualifications while taking her nurse's training, such, for instance, as being congenial with her coworkers, handling patients with tact and kindness, successfully demonstrating during her operating room training ability to work under strain in emergencies, and ability to control the too-often-displayed temper. If a student is found to be unsuited for the work, she should be so advised and not be graduated to become a failure in the field.

The course should be from six to twelve months in duration. Each student or group should enter class work for beginners, following the outline of theory, and not be included in classes with more advanced students. She should be familiarized first with the department, its routine set-up, how to clean and replace equipment used in the day's work; taught the importance of preliminary visits, what to observe, that is, age, size, sex, physical exami-

nation, how this observation will be of value in helping her to understand what she is to deal with, and how these factors will govern the selection of the anesthetic as well as its administration. The importance of follow-up visits should also be emphasized. The student of today, through her training in the school of nursing, is familiar with accurately kept patients' records, knows how a graphic chart should be kept, is capable of taking blood pressure, pulse, and respiration, and observing objective symptoms, but she is not familiar with these in relation to anesthesia. At first she should be permitted to keep records during the anesthesias, taking pulse, respiration and blood pressure for the anesthetist at the same time she is being instructed in the manipulation of the gas machine. This does not mean that the anesthetist administering the anesthetic does not assume full responsibility, but the beginner will not find it so difficult to watch the patient, plus the operation of the machine and keeping the record, if all three are not to be learned at the same time.

The actual administration of anesthetics should be started with drop ether, open and semi-open method. The use of gas should be started with nitrous oxide, in short cases, and gas induction for ether sequence. To some of you this may seem old, but if the student has this training as a basis, and learns the signs of these, the administration of the newer anesthetics will not be so difficult. Drop ether and gas induction with ether sequence are old, but certainly still in use. The student who is not thoroughly familiar with these may take a position where they are used, then you hear the remark, "She could not even give drop ether." We who were thoroughly trained in these two anesthetics only know how easy it was to begin the ad-

ministration of the newer gases.

It is impossible today to provide experience in the use of ethyl chloride and chloroform; although the student may observe or even give a few cases, this cannot be termed experience. The newer anesthetics are in general use now, but with any of these where experience cannot be given, it is important that the student be taught the physiology and the technique of their administration. It is certainly best that students be made familiar with the operation of all types of gas machines, but where this is not possible they can be taught that all are similar, and it will not be difficult to manage the different makes where the principles are well understood.

The reference reading for the student should be selected and assigned by the instructor as each subject is being covered. They should visit other clinics if possible. The reading of articles and the visiting of clinics will give the student broader ideas and keep her from being narrow regarding her own training. The value of the oral quiz and written examination is of definite significance in determining the aptness of the student in the grasp-

ing of the subject and her ability to retain it.

In conclusion, I want to stress the importance of supervision. It is not only fair to the student, but to the patient and the doctor as well. In anesthesia there is much that can be learned only in the operating room; as in respiration, the ear must be trained to the different breath sounds; the eye signs and color signs can be learned by contact only. Signs cannot be explained in the classroom and the student expected to recognize them the first time they are actually encountered, nor can the student be expected to work quickly in an emergency when it is the first time such a difficulty has arisen. I do not mean to under-emphasize the value of class room instruction, but it must be followed up and explained as it comes up in actual practice. A good anesthetist is made by the giving of anesthetics. Experience is the point that counts.

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## DISCUSSION

### FRANCES HESS

*Long Island College Hospital, Brooklyn, N. Y.*

Miss Vickers has correctly stated that this subject has been well covered before; but as it is a very important one. I believe that too much stress cannot be given to the subject of adequate training for the nurse anesthetist. Since the applicants are far too numerous for this course, there should be no difficulty in choosing those best qualified for this responsible profession and those selected, but found not fitted,

should not be permitted to finish the course.

The physical fitness of the applicant is of great importance and it should therefore be required that one entering the field of anesthesia undergo a thorough physical examination (including an x-ray of the chest) to determine the following:

- (1) Absence or presence of tuberculosis

- (2) Partial or complete deafness
- (3) Poor vision
- (4) Color-blindness (This is very important in determining the presence of cyanosis, pallor, etcetera)
- (5) Cardiac disease

No matter how interested or desirable the student may be otherwise, the handicaps just mentioned would prevent her from administering anesthetics safely.

Anesthesia affects the comfort and safety of a large percentage of the patients admitted to hospitals. It is obvious, therefore, that the safety and comfort of the patient as well as the convenience of the surgeon must never be overlooked.

We must never forget that the responsibility of the anesthetist begins from the moment the operation is decided upon, until the patient is free from any ill effects that may be attributed to the narcosis. Although the surgeon is legally responsible for the patient in the operating room, it is the duty of the anesthetist to evaluate accurately the patient's condition throughout the operation and to inform the surgeon accordingly.

The anesthetist should be trained so as to be capable of:

1. Understanding the physiology of respiration and the circulation.
2. Understanding the pharmacological action of all drugs used before, during, and after operation.
3. Administering competently the various types of anesthetics.
4. Using various types of anesthetic equipment.
5. Evaluating the patient's condition by the physical and laboratory findings.
6. Evaluating the patient's ability to withstand the surgical procedure planned.
7. Instilling a feeling of confidence

in the patient by being tactful, understanding, and composed.

8. Being an integral part of the surgical team.

9. Observing carefully all changes in the patient's condition: pulse, respirations, blood pressure, color, and temperature.

10. Shifting the patient's position so as to minimize postoperative discomfort or complications.

11. Anticipating shock or other complications—taking or suggesting effective measures to forestall disaster.

12. Ascertaining definitely at post-operative visits that no complications have arisen which might be the result of the anesthetic.

Different schools have various types of surgery in their clinics. Some are highly specialized and major in certain limited fields—others are general in character. It is difficult, therefore, to give a complete course in any one hospital unless the students are given an opportunity to observe all types of major surgery in other clinics. This should be done under the personal supervision of an instructor and field trips should be repeated as often as found necessary. It is very helpful, whenever possible, for the student to visit the plants which manufacture anesthetic agents.

Because the technique by which anesthetic drugs are administered will always remain the important factor in determining the success or failure of the chosen anesthetic, the practical instruction should not be sacrificed for theory, although both are important.

The subject of training the nurse anesthetist is admittedly too broad to cover all details in the time available but it is hoped that the foregoing may emphasize some of the more important points that have not been covered by Miss Vickers.



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